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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,275	07/02/2001	Jong Heon Lee	2060-3-09	2231
35884	7590	03/14/2005		
LEE, HONG, DEGERMAN, KANG & SCHMADEKA, P.C. 801 SOUTH FIQUEROA STREET 14TH FLOOR LOS ANGELES, CA 90017			EXAMINER HAROLD, JEFFEREY F	
			ART UNIT 2644	PAPER NUMBER

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/898,275

Applicant(s)

LEE

Examiner

Jefferey F Harold

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-3,8 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 4-7,9-11 and 15-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. ***Claims 1 and 12*** are rejected under 35 U.S.C. 102(b) as being anticipated by Eklof (United States Patent 5,790,654).

Regarding **claim 1**, Eklof discloses a digitally controlled ring signal generator. In addition, Eklof discloses a ring relay control unit of a foreign exchange station for signaling a subscriber telephone, the ring relay control unit comprising: a main control unit for generating a relay interrupt command; a relay control device connected to the main control unit to generate a relay control signal and a ring generation inhibit signal in response to the relay interrupt command from the main control unit; a ring signal generator connected to the relay control device for generating a ring signal to the subscriber telephone in response to the ring generation inhibit signal, and for transmitting a synchronous signal to the relay control device, wherein the relay control device generates the relay control signal in response to the synchronous signal; and a relay for selectively transferring the ring signal to the subscriber telephone from the ring signal generator in response to the relay control signal, as disclosed at column 3, line 54 through column 4, line 39, and exhibited in figures 1 and 5.

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Regarding **claim 12**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claims 2 and 13*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Eklof in view of applicant's admitted prior art.

Regarding **claim 2**, Eklof discloses everything claimed as applied above (see claim 1), however, Eklof fails to disclose a SLIC for interfacing a call signal to the subscriber telephone, wherein the relay selectively transfers the call signal and the ring signal to the subscriber telephone from the SLIC and the ring signal generator. However, the examiner maintains that it was well known in the art to provide a SLIC for interfacing a call signal to the subscriber telephone, wherein the relay selectively transfers the call signal and the ring signal to the subscriber telephone from the SLIC and the ring signal generator, as taught by applicant's admitted prior art.

In addition, applicant's admitted prior art discloses a SLIC for interfacing a call signal to the subscriber telephone, wherein the relay selectively transfers the call signal and the ring signal to the subscriber telephone from the SLIC and the ring signal

generator, as disclosed on page 2, line 12 through page 3, line 10 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eklof by specifically providing a SLIC for interfacing a call signal to the subscriber telephone, wherein the relay selectively transfers the call signal and the ring signal to the subscriber telephone from the SLIC and the ring signal generator, as taught by applicant's admitted prior art, for the purpose of saving power.

Regarding **claim 13**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 2.

3. **Claims 3, 8, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Eklof in view of well know prior art (MPEP 2144.03).

Regarding **claim 3**, Eklof discloses everything claimed, as applied above, (see claim 1), however, Eklof fails to disclose wherein the synchronous signal transferred to the relay control device is a zero-crossing synchronous signal. However, the examiner takes official notice of the fact that it was well know in the art to provide wherein the synchronous signal transferred to the relay control device is a zero-crossing synchronous signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eklof by specifically providing wherein the

synchronous signal transferred to the relay control device is a zero-crossing synchronous signal, for the purpose of reducing noise.

Regarding **claims 8 and 14**, they are interpreted and thus rejected for the reasons set forth above in the rejection of claim 3.

#### ***Allowable Subject Matter***

4. ***Claims 19 and 20*** are allowed.
5. ***Claims 4-7, 9-11, and 15-18*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azami et al. (United States Patent 6,434,225), discloses a communication support system in which a ringing sound control processing is performed in response to a call from a telephone network.

Huah et al. (United States Patent 5,666,355), discloses a power consumption control method and apparatus for a communication system subscriber unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F Harold whose telephone number is 703-306-5836. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

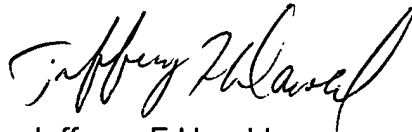
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH  
March 3, 2005



Jefferey F Harold  
Examiner  
Art Unit 2644